STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/563,976
Source: IFW
Date Processed by STIC: 1/23/06

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO **REDUCE** ERRORED SEQUENCE LISTINGS, **PLEASE** USE THE **CHECKER VERSION 4.4.0 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<**http://www.uspto.gov/ebc/efs/downloads/documents.htm**> , **EFS Submission User Manual** - ePAVE)
2. **U.S. Postal Service:** Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. **Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):** U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/10/06

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER: 10/563,976

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1	Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor **after** creating it. Please adjust your right margin to .3; this will prevent "wrapping."
2	Invalid Line Length	The rules require that a line **not exceed** 72 characters in length. This includes white spaces.
3	Misaligned Amino Numbering	The numbering under each 5th amino acid is misaligned. Do **not** use tab codes between numbers; use **space characters**, instead.
4	Non-ASCII	The submitted file was **not** saved in ASCII(DOS) text, as **required** by the Sequence Rules. **Please ensure your subsequent submission is saved in ASCII text.**
5	Variable Length	Sequence(s)____contain n's or Xaa's representing more than one residue. **Per Sequence Rules, each n or Xaa can only represent a single residue.** Please present the **maximum** number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6	PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.**
7	Skipped Sequences (OLD RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for **each** skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to **include** the skipped sequences.
8	Skipped Sequences (NEW RULES)	Sequence(s) _____ missing. If **intentional**, please insert the following lines for **each** skipped sequence. <210> sequence id number <400> sequence id number 000
9	Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of **n** or **Xaa**, and which residue **n** or **Xaa** represents.
10	Invalid <213> Response	Per 1.823 of Sequence Rules, the only **valid** <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is **required** when <213> response is Unknown or is Artificial Sequence
11	Use of <220>	Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
12	PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13	Misuse of n/Xaa	"n" can **only** represent a single nucleotide; "Xaa" can **only** represent a single amino acid

IFWP

RAW SEQUENCE LISTING DATE: 01/23/2006
PATENT APPLICATION: **US/10/563,976** TIME: 09:57:37

Input Set : **A:\HOI-14402.ST25.txt**
Output Set: **N:\CRF4\01232006\J563976.raw**

```
      3 <110> APPLICANT: Sorensen, Anders Per
      4       Benfield, Thomas Lars
      5       Lundgren, Jens Dilling
      6       Kempe, Thomas D.
      8 <120> TITLE OF INVENTION: BINDING MEMBER TOWARDS PNEUMOCOCCUS SURFACE
ADHESIN A PROTEIN
      9       (PsaA)
     11 <130> FILE REFERENCE: HOI-14402/16
C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/563,976
C--> 13 <141> CURRENT FILING DATE: 2006-01-09
     13 <150> PRIOR APPLICATION NUMBER: PCT/DK04/000492
     14 <151> PRIOR FILING DATE: 2004-07-08
     16 <150> PRIOR APPLICATION NUMBER: US 60/486,647
     17 <151> PRIOR FILING DATE: 2003-07-11
     19 <150> PRIOR APPLICATION NUMBER: PA 2003 01044
     20 <151> PRIOR FILING DATE: 2003-07-08
     22 <160> NUMBER OF SEQ ID NOS: 56
     24 <170> SOFTWARE: PatentIn version 3.3
     26 <210> SEQ ID NO: 1
     27 <211> LENGTH: 33
     28 <212> TYPE: DNA
     29 <213> ORGANISM: Homo sapiens
     32 <220> FEATURE:
     33 <221> NAME/KEY: CDS
     34 <222> LOCATION: (1)..(33)
     35 <223> OTHER INFORMATION: Sequence from human antibody generated in mouse.
     37 <400> SEQUENCE: 1
     38 cgg gcg agt cag ggt att agc agc tgg tta gcc                          33
     39 Arg Ala Ser Gln Gly Ile Ser Ser Trp Leu Ala
     40 1               5                   10
     43 <210> SEQ ID NO: 2
     44 <211> LENGTH: 11
     45 <212> TYPE: PRT
     46 <213> ORGANISM: Homo sapiens
     48 <400> SEQUENCE: 2
     50 Arg Ala Ser Gln Gly Ile Ser Ser Trp Leu Ala
     51 1               5                   10
     54 <210> SEQ ID NO: 3
     55 <211> LENGTH: 21
     56 <212> TYPE: DNA
     57 <213> ORGANISM: Homo sapiens
     60 <220> FEATURE:
     61 <221> NAME/KEY: CDS
     62 <222> LOCATION: (1)..(21)
```

pp 6-8

Does Not Comply
Corrected Diskette Needed

RAW SEQUENCE LISTING DATE: 01/23/2006
PATENT APPLICATION: US/10/563,976 TIME: 09:57:37

Input Set : A:\HOI-14402.ST25.txt
Output Set: N:\CRF4\01232006\J563976.raw

```
     63 <223> OTHER INFORMATION: Sequence from human antibody generated in mouse.
     65 <400> SEQUENCE: 3
     66 gtt gca tcc agt ttg caa agt                                          21
     67 Val Ala Ser Ser Leu Gln Ser
     68 1               5
     71 <210> SEQ ID NO: 4
     72 <211> LENGTH: 7
     73 <212> TYPE: PRT
     74 <213> ORGANISM: Homo sapiens
     76 <400> SEQUENCE: 4
     78 Val Ala Ser Ser Leu Gln Ser
     79 1               5
     82 <210> SEQ ID NO: 5
     83 <211> LENGTH: 27
     84 <212> TYPE: DNA
     85 <213> ORGANISM: Homo sapiens
     88 <220> FEATURE:
     89 <221> NAME/KEY: CDS
     90 <222> LOCATION: (1)..(27)
     91 <223> OTHER INFORMATION: Sequence from human antibody generated in mouse.
     93 <400> SEQUENCE: 5
     94 caa cag tat aat agc tat cct ccg acg                                   27
     95 Gln Gln Tyr Asn Ser Tyr Pro Pro Thr
     96 1               5
     99 <210> SEQ ID NO: 6
    100 <211> LENGTH: 9
    101 <212> TYPE: PRT
    102 <213> ORGANISM: Homo sapiens
    104 <400> SEQUENCE: 6
    106 Gln Gln Tyr Asn Ser Tyr Pro Pro Thr
    107 1               5
    110 <210> SEQ ID NO: 7
    111 <211> LENGTH: 321
    112 <212> TYPE: DNA
    113 <213> ORGANISM: Homo sapiens
    116 <220> FEATURE:
    117 <221> NAME/KEY: CDS
    118 <222> LOCATION: (1)..(321)
    119 <223> OTHER INFORMATION: Sequence from human antibody generated in mouse.
V-segment: 4-34
    120       and J-segment: JK1
    122 <220> FEATURE:
W--> 123 <221> NAME/KEY: CDR1
    124 <222> LOCATION: (70)..(120)
    126 <220> FEATURE:
W--> 127 <221> NAME/KEY: CDR2
    128 <222> LOCATION: (148)..(168)
    130 <220> FEATURE:
W--> 131 <221> NAME/KEY: CDR3
    132 <222> LOCATION: (265)..(291)
```

RAW SEQUENCE LISTING DATE: 01/23/2006
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Input Set : **A:\HOI-14402.ST25.txt**
Output Set: **N:\CRF4\01232006\J563976.raw**

```
134 <400> SEQUENCE: 7
135 gac atc cag atg acc cag tct cca tcc tca ctg tct gca tct gta gga       48
136 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
137 1               5                   10                  15
139 gac aga gtc acc atc act tgt cgg gcg agt cag ggt att agc agc tgg       96
140 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser Trp
141             20                  25                  30
143 tta gcc tgg tat cag cag aaa cca gag aaa gcc cct gag tcc ctg atc      144
144 Leu Ala Trp Tyr Gln Gln Lys Pro Glu Lys Ala Pro Glu Ser Leu Ile
145         35                  40                  45
147 tat gtt gca tcc agt ttg caa agt ggg gtc cca tca agg ttc agc ggc      192
148 Tyr Val Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
149     50                  55                  60
151 agt gga tct ggg aca gat ttc act ctc acc atc agc agc ctg cag cct      240
152 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
153 65                  70                  75                  80
155 gaa gat ttt gca act tat tac tgc caa cag tat aat agc tat cct ccg      288
156 Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Asn Ser Tyr Pro Pro
157                 85                  90                  95
159 acg ttc ggc caa ggg acc aag gtg gaa atc aaa                         321
160 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
161             100                 105
164 <210> SEQ ID NO: 8
165 <211> LENGTH: 107
166 <212> TYPE: PRT
167 <213> ORGANISM: Homo sapiens
169 <400> SEQUENCE: 8
171 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
172 1               5                   10                  15
175 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Ser Ser Trp
176             20                  25                  30
179 Leu Ala Trp Tyr Gln Gln Lys Pro Glu Lys Ala Pro Glu Ser Leu Ile
180         35                  40                  45
183 Tyr Val Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
184     50                  55                  60
187 Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
188 65                  70                  75                  80
191 Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Tyr Asn Ser Tyr Pro Pro
192                 85                  90                  95
195 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys
196             100                 105
199 <210> SEQ ID NO: 9
200 <211> LENGTH: 15
201 <212> TYPE: DNA
202 <213> ORGANISM: Homo sapiens
205 <220> FEATURE:
206 <221> NAME/KEY: CDS
207 <222> LOCATION: (1)..(15)
208 <223> OTHER INFORMATION: Sequence from human antibody generated in mouse.
```

RAW SEQUENCE LISTING DATE: 01/23/2006
PATENT APPLICATION: US/10/563,976 TIME: 09:57:37

Input Set : A:\HOI-14402.ST25.txt
Output Set: N:\CRF4\01232006\J563976.raw

```
210 <400> SEQUENCE: 9
211 ggt ttc tcc tgg agc                                                  15
212 Gly Phe Ser Trp Ser
213 1               5
216 <210> SEQ ID NO: 10
217 <211> LENGTH: 5
218 <212> TYPE: PRT
219 <213> ORGANISM: Homo sapiens
221 <400> SEQUENCE: 10
223 Gly Phe Ser Trp Ser
224 1               5
227 <210> SEQ ID NO: 11
228 <211> LENGTH: 51
229 <212> TYPE: DNA
230 <213> ORGANISM: Homo sapiens
233 <220> FEATURE:
234 <221> NAME/KEY: CDS
235 <222> LOCATION: (1)..(51)
236 <223> OTHER INFORMATION: Sequence from human antibody generated in mouse.
238 <400> SEQUENCE: 11
239 gaa atc gat tat aga gga agc acc aac tac aac ccg tcc ctc aag agt       48
240 Glu Ile Asp Tyr Arg Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys Ser
241 1               5                   10                  15
243 cga                                                                 51
244 Arg
248 <210> SEQ ID NO: 12
249 <211> LENGTH: 17
250 <212> TYPE: PRT
251 <213> ORGANISM: Homo sapiens
253 <400> SEQUENCE: 12
255 Glu Ile Asp Tyr Arg Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys Ser
256 1               5                   10                  15
259 Arg
263 <210> SEQ ID NO: 13
264 <211> LENGTH: 21
265 <212> TYPE: DNA
266 <213> ORGANISM: Homo sapiens
269 <220> FEATURE:
270 <221> NAME/KEY: CDS
271 <222> LOCATION: (1)..(21)
272 <223> OTHER INFORMATION: Sequence from human antibody generated in mouse.
274 <400> SEQUENCE: 13
275 ggg ggg ccc cgc ttt gac tac                                           21
276 Gly Gly Pro Arg Phe Asp Tyr
277 1               5
280 <210> SEQ ID NO: 14
281 <211> LENGTH: 7
282 <212> TYPE: PRT
283 <213> ORGANISM: Homo sapiens
```

RAW SEQUENCE LISTING DATE: 01/23/2006
PATENT APPLICATION: **US/10/563,976** TIME: 09:57:37

Input Set : **A:\HOI-14402.ST25.txt**
Output Set: **N:\CRF4\01232006\J563976.raw**

```
285 <400> SEQUENCE: 14
287 Gly Gly Pro Arg Phe Asp Tyr
288 1               5
291 <210> SEQ ID NO: 15
292 <211> LENGTH: 345
293 <212> TYPE: DNA
294 <213> ORGANISM: Homo sapiens
297 <220> FEATURE:
298 <221> NAME/KEY: CDS
299 <222> LOCATION: (1)..(345)
300 <223> OTHER INFORMATION: Sequence from human antibody generated in mouse.
301       V-segment: 4-34, D-segment: unknown, J-segment: JH4b
303 <220> FEATURE:
W--> 304 <221> NAME/KEY: CDR1
305 <222> LOCATION: (91)..(102)
307 <220> FEATURE:
W--> 308 <221> NAME/KEY: CDR2
309 <222> LOCATION: (148)..(199)
311 <220> FEATURE:
W--> 312 <221> NAME/KEY: CDR3
313 <222> LOCATION: (191)..(312)
315 <400> SEQUENCE: 15
316 cag gtg cga cta cag cag tgg ggc gca gga ctg ttg aag cct tcg gag       48
317 Gln Val Arg Leu Gln Gln Trp Gly Ala Gly Leu Leu Lys Pro Ser Glu
318 1               5                   10                  15
320 acc ctg tcc ctc acc tgc gct gtc ttt ggt ggg tcc ttc agt ggt ttc       96
321 Thr Leu Ser Leu Thr Cys Ala Val Phe Gly Gly Ser Phe Ser Gly Phe
322             20                  25                  30
324 tcc tgg agc tgg atc cgc cag acc cca ggg aag ggg ctg gag tgg atc      144
325 Ser Trp Ser Trp Ile Arg Gln Thr Pro Gly Lys Gly Leu Glu Trp Ile
326         35                  40                  45
328 ggg gaa atc gat tat aga gga agc acc aac tac aac ccg tcc ctc aag      192
329 Gly Glu Ile Asp Tyr Arg Gly Ser Thr Asn Tyr Asn Pro Ser Leu Lys
330     50                  55                  60
332 agt cga gtc acc ata tta aga gac acg tcc agg agc cag ttc tcc ctg      240
333 Ser Arg Val Thr Ile Leu Arg Asp Thr Ser Arg Ser Gln Phe Ser Leu
334 65                  70                  75                  80
336 aag ttg agc tcc gtg acc gcc gcg gac tcg gct gtg ttt tat tgt gcg      288
337 Lys Leu Ser Ser Val Thr Ala Ala Asp Ser Ala Val Phe Tyr Cys Ala
338                 85                  90                  95
340 aga ggg ggg ccc cgc ttt gac tac tgg ggc cag gga acc ctg gtc acc      336
341 Arg Gly Gly Pro Arg Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr
342             100                 105                 110
344 gtc tcc tca                                                       345
345 Val Ser Ser
346         115
349 <210> SEQ ID NO: 16
350 <211> LENGTH: 115
351 <212> TYPE: PRT
```

<210> 17
<211> 33
<212> DNA
<213> synthetic

invalid response. See item 10 on Error Summary Sheet.

This error appears in subsequent sequences, too.

<210> 18
<211> 11
<212> PRT
<213> synthetic

<220>
<221> misc_feature
<222> (33)..(33)
<223> unknown nucleotide

<400> 18

Arg Ala Ser Gln Ser Val Ser Ser Tyr Leu Ala
1 5 10

error

delete this - it applies to the previous (DNA) sequence

same error in Seq. 24

8

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 01/23/2006
PATENT APPLICATION: US/10/563,976 TIME: 09:57:38

FYI

Input Set : A:\HOI-14402.ST25.txt
Output Set: N:\CRF4\01232006\J563976.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:17; N Pos. 33
Seq#:23; N Pos. 102

VERIFICATION SUMMARY DATE: 01/23/2006
PATENT APPLICATION: **US/10/563,976** TIME: 09:57:38

Input Set : **A:\HOI-14402.ST25.txt**
Output Set: **N:\CRF4\01232006\J563976.raw**

L:13 M:270 C: Current Application Number differs, Replaced Current Application No
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:123 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:7
L:127 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:7
L:131 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:7
L:304 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:15
L:308 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:15
L:312 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:15
L:404 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0
L:494 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:23
L:503 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:23
L:507 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:23
L:519 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:96
L:692 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:31
L:696 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:31
L:700 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:31
L:873 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:39
L:877 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:39
L:881 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:39
L:1054 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:47
L:1058 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:47
L:1062 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:47